

UNITED STATE DEPARTMENT OF COMMERCE United States Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO 09/505,713 02/17/00 JUD **EXAMINER** IM52/0628 Fisher Christen & Sabol JACKSON, M 1725 K Street NW ART UNIT PAPER NUMBER Suite 1401 Washington DC 20006 1773 DATE MAILED: 06/28/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

| Office Action Summary | | Application No. | Applicant(s) | | |
|--|--|-------------------------|--------------|--|--|
| | | 09/505,713 | JUD ET AL. | | |
| | | Examiner | Art Unit | | |
| | | Monique R Jackson | 1773 | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address | | | | | |
| Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM | | | | | |
| THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status | | | | | |
| 1)🛛 | Responsive to communication(s) filed on 23 A | <u> April 2001</u> . | | | |
| 2a) <u></u> □ | This action is FINAL. 2b)⊠ Th | is action is non-final. | | | |
| 3) | Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | |
| Disposition of Claims | | | | | |
| 4) Claim(s) 15-19,21,22,27-29 and 32-35 is/are pending in the application. | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | |
| 5) 🗌 | 5) Claim(s) is/are allowed. | | | | |
| 6)⊠ | 6)⊠ Claim(s) <u>15-19,21,22,27-29 and 32-35</u> is/are rejected. | | | | |
| 7) | 7) Claim(s) is/are objected to. | | | | |
| 8) Claims are subject to restriction and/or election requirement. | | | | | |
| Application Papers | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | |
| 10) The drawing(s) filed on is/are objected to by the Examiner. | | | | | |
| 11) The proposed drawing correction filed on is: a) □ approved b) □ disapproved. | | | | | |
| 12) The oath or declaration is objected to by the Examiner. | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | |
| 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e). | | | | | |
| - | | | | | |
| Attachment(s) | | | | | |
| 15) Notice of References Cited (PTO-892) 18) Interview Summary (PTO-413) Paper No(s) | | | | | |
| 16) Notice of Draftsperson's Patent Drawing Review (PTO-948) 17) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 20) Other: | | | | | |

Page 2

Application/Control Number: 09/505,713

Art Unit: 1773

DETAILED ACTION

- 1. The amendment filed 4/23/01 has been entered. Claims 20, 23-26, and 30-31 have been canceled. New claims 32-35 have been added. Claims 15-19, 21-22, 27-29, and 32-35 are pending in the application.
- 2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- Claims 15-19, 21-22, 27-29, and 32-35 are rejected under 35 U.S.C. 103(a) as 3. unpatentable over Misasa et al (USPN 4,559,266). Misasa et al teach a laminated material useful for packaging materials for foodstuffs that has superior gas barrier properties, light shielding properties and moisture resistance (Abstract.) The laminate comprises an inner layer of polyolefin such as polypropylene (A); a second gas barrier layer consisting essentially of a saponified product of ethylene-vinyl acetate copolymer, polyester resin, or polyamide resin (B); a third metal layer such as aluminum (C); and a fourth outer layer such as polyester resin like PETP (Claim 1; Col. 2, lines 12-18; Col. 2, lines 51-56; and Col. 3, lines 24-40.) In producing the laminated material, it is preferred to employ a process in which a laminated material of layers A and B and a laminated material of layers C and D are previously produced and the two laminated materials are then laminated to each other (Col. 4, lines 10-14.) The laminate can be formed by bonding the layers together by any suitable procedure such as extrusion lamination or dry lamination using an adhesive coating or primer (Col. 3, line 51 - Col. 4, line 9; and Examples.) The amount of adhesive coated is from 2 to 10 grams per square meter and preferably between 1.5 and 8 grams per square meter (Col. 3, lines 67-Col. 4, line 2.) Between layer B and C may be interposed if necessary a suitable layer of a synthetic resin such as

Page 3

Application/Control Number: 09/505,713

Art Unit: 1773

polyethylene or polypropylene (Col. 3, lines 2-24.) The laminate can be sterilized and used as a food packaging material or to form containers for packaging foods (Col. 3, lines 60-64; and Col. 4, lines 41-44.) Though Misasa et al teach that various other polymers may be utilized for different layers other than the instantly claimed polymers, Misasa et al does disclose the polymers instantly claimed in the order as instantly claimed, and it would have been obvious to one having ordinary skill in the art at the time of the invention to utilize any of the polymers or polymer disclosed by Misasa et al in the disclosed combinations to produce a multilayer composite. Misasa et al do not teach the particular thickness ranges as instantly claimed, however, it is well known in the art that the thickness of a particular layer in a multilayer composite is a result-affected variable affecting film properties such as gas and water-vapor permeability, heat-resistance, flexibility and sealing properties, and therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to utilize routine experimentation to determine the optimum thickness for composite layer(s) based on the desired film properties required for a particular end use, including the use of a thicker metal foil as opposed to a metal-vacuum deposited layer. Further, in producing multilayer composites, the use of lamination, extrusion-coating or coextrusion or combinations of these methods, with or without an adhesive between adjacent layers, are conventional and well known in the art and any combination of these methods in producing the multilayer composite taught by Misasa et al would have been obvious to one having ordinary skill in the art at the time of the invention.

4. Ito et al (USPN 4,291,085.) Ito et al teach a packaging material for food to be subject to sterilization which comprises a flexible laminate sheet including a heat-sealable inner layer of polypropylene (a), an aluminum foil intermediate layer (c), an outer layer of heat-resistant

Application/Control Number: 09/505,713

Art Unit: 1773

thermoplastic or thermosetting resin such as the polyester PETP or a biaxially oriented film (b), one or more impact-absorbing layers between (a) and (c) or (b) and (c), and if necessary, adhesive or primer layers interposed between every two adjacent layers (Abstract; Col. 3, lines 35-45; Col. 4, lines 17-35; Col. 7, line 65 - Col. 8, line 18.) The impact-absorbing layer is a thermoplastic resin having the desired impact properties such as stretched or unstretched polyamides or copolyamides, or stretched polypropylene having the desired impact absorbing coefficient and a melting point higher than the melting point of the polypropylene of (a) (Col. 9, lines 55-60, Col. 10, lines 34-36.) The packaging laminate can be formed into bags for food packaging with the layer thickness selected to produce a laminate with the desired properties, with a preferred thickness of 10-50 µm for the outer layer, 10-50 µm for the oxygen barrier layer or 5-20µm for the aluminum foil layer, and 30-100µm for the heat-sealable polypropylene layer (a) and 5-40µm for each impact-absorbing layer (Col. 12, lines 7-36.) Though Ito et al teach that other polymers may be utilized for different layers other than the instantly claimed polymers, Ito et al does disclose the polymers instantly claimed in the order as instantly claimed, and it would have been obvious to one having ordinary skill in the art at the time of the invention to utilize any of the polymers or polymer disclosed by Ito et al in the disclosed combinations to produce a multilayer composite. Ito et al do not teach the particular thickness ranges as instantly claimed, however, it is well known in the art that the thickness of a particular layer in a multilayer composite is a result-affected variable affecting film properties such as gas and water-vapor permeability, heat-resistance, flexibility and sealing properties, and therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to utilize routine experimentation to determine the optimum thickness for composite layer(s) based on the desired

Application/Control Number: 09/505,713

Art Unit: 1773

film properties required for a particular end use. Further, in producing multilayer composites, the use of lamination, extrusion-coating or coextrusion or combinations of these methods, with or without an adhesive between adjacent layers, are conventional and well known in the art and any combination of these methods in producing the multilayer composite taught by Ito et al would have been obvious to one having ordinary skill in the art at the time of the invention.

Response to Arguments

5. Applicant's arguments with respect to claims 15-31 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monique R Jackson whose telephone number is 703-308-0428. The examiner can normally be reached on Mondays-Thursdays, 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul J Thibodeau can be reached on 703-308-2367. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-5436 for regular communications and 703-305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

mri

June 21, 2001

Paul Thibodeau Supervisory Patent Examiner Technology Center 1700

Thinke